UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/607,162	06/29/2000	THOMAS B. HALL	102850-11	7115

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EXAMINER
HARRISON, CHANTE E

ART UNIT	PAPER NUMBER
2672	

DATE MAILED: 10/23/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 07-01)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on *29 June 2000* .

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☐ Claim(s) *1-20* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

       1.☐ Certified copies of the priority documents have been received.

       2.☐ Certified copies of the priority documents have been received in Application No. _____ .

       3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)		4)☐ Interview Summary (PTO-413) Paper No(s). _____ .	
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)		5)☐ Notice of Informal Patent Application (PTO-152)	
3)☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *6* .		6)☐ Other: .	

DETAILED ACTION

Information Disclosure Statement

1.   The information disclosure statement filed 11/17/00 fails to comply with 37 CFR

1.98(a)(2), which requires a legible copy of each U.S. and foreign patent; each

publication or that portion which caused it to be listed; and all other information or that

portion which caused it to be listed. It has been placed in the application file, but the

following information referred to therein has not been considered: Yoneda, T. et al., " A

New Communication Tool: Time Dependant Multimedia Document, "Proceedings of the

Intenational Conference on Distrubed Computing Systems, vol. Conf. 12, p. 90-7,

(6/992). Please provide page 90 of the above article.

Claim Rejections - 35 USC § 102

1.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the
United States before the invention thereof by the applicant for patent, or on an international application
by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this
title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act

of 1999 (AIPA) do not apply to the examination of this application as the application

being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily

published under 35 U.S.C. 122(b). Therefore, this application is examined under 35

U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

1.   Claims 1-4, 6, 11 and 12 are rejected under 35 U.S.C. 102(e) as being

anticipated by Cave, U.S. Patent 5,841,438, 11/1998.

As per independent claim 1, Cave discloses separating data into graphical and

multimedia data (Fig. 2A), providing three sequencing schemes within the multimedia

data (Fig. 2A) by providing a first scheme is a hierarchical structure of bounding boxes

to synchronize displayed graphical data with time ordered events (Fig. 2A), a sequence

map containing tracks, each track being a path through the bounding boxes (Fig. 2A), a

third scheme comprising a time map defining the time ordered events (Fig. 2A).

As per dependent claim 2, Cave discloses the graphical data are a musical notation and the time ordered events correspond to a musical performance (Fig. 2A "205"; col. 6, ll. 22-26).

As per dependent claim 3, Cave discloses the bounding boxes is defined for a musical score (col. 6, ll. 16-21; abstract).

As per dependent claim 4, Cave discloses a plurality of time maps corresponding to a plurality of musical performances (Fig. 2A).

As per dependant claim 6, Cave discloses a single bit for each track in the sequence map (col. 7, ll. 20-30), each bit indicating whether a bounding box is associated with a time event (col. 7, ll. 45-55).

As per independent claim 11, Cave discloses using the bounding boxes to position and zoom the displayed interactive graphics in response to user input (col. 8, ll. 37-46). Claim 11 claims a method performed in the computer of claim 1. The rationale as applied in the rejection of claim 1 applies herein.

As per dependent claim 12, Cave discloses using the bounding boxes to highlight the displayed graphics (col. 9, ll. 1-10).

Claim Rejections - 35 USC § 103

1.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

2.   Claims 5, 7-10, 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Cave as applied to claim 1 and further in view of Stephen Kennedy, U.S. Patent

5,690,496, 11/1997.

As per dependent claim 5, Cave fails to specifically disclose the three

sequencing schemes is done on the server, which Kennedy discloses (col. 3, ll. 60-

61col. 4, ll. 5-22). It would have been obvious to one of ordinary skill in the art to

combine the server disclosed by Kennedy with the disclosure of Cave because Cave

teaches storing files on multiple devices for delivery and storing files on a hard drive

enables shared access over a network.

As per independent claim 7, Cave discloses graphical data logically separate

from multimedia data (Fig. 2A), multimedia data comprising a plurality of data subsets

(Fig. 2A), a plurality of bounding boxes (Fig. 2A), a sequence map containing tracks,

each track corresponding to a sequence of the bounding boxes (Fig. 2A), and a time

map synchronizing audio or video (Fig. 2A). Cave discloses storing data (col. 6, ll. 1-

15), but fails to disclose a server, which Kennedy discloses (col. 3, ll. 60-61; col. 4,ll. 5-

22). It would have been obvious to one of ordinary skill in the art to include the server disclosed by Kennedy with the disclosure of Cave because Cave teaches storing files on multiple devices for delivery and storing files on a hard drive enables shared access over a network.

As per dependent claim 8, Cave discloses a display (Fig. 1), as does Kennedy (Fig. 7).

As per dependent claim 9, Cave discloses tagging a bounding box with information that can be added or removed and displayed upon user request (col. 6, ll. 29-37), as does Kennedy (col. 7, ll. 20-23, 55-61).

As per dependent claim 10, Cave discloses the bounding boxes defining location of the graphical data on the display (col. 6, ll. 15-21), as does Kennedy (col. 4, ll. 40-45).

As per dependent claim 13, Cave fails to disclose highlighting the graphics in sync to an external performance, which is disclosed by Kennedy (col. 6, ll. 5-25). It would have been obvious to combine the highlighting of graphics in sync to an external performance with the disclosure of Cave because Cave teaches highlighting the score during playback and highlighting helps the score to playback in a timely manner.

As per independent claim 14, Cave discloses the discloses graphical and multimedia data corresponding to interactive graphics (col. 6, ll. 5-15; Fig. 2A), bounding boxes with the multimedia data (Fig. 2A), using the bounding boxes to position and zoom the displayed interactive graphics and highlighting the graphics in response to user input (col. 8, ll. 30-46; col. 9, ll. 1-10), but fails to disclose highlighting the graphics in sync to an external performance and a server. Kennedy discloses highlighting the graphics in sync to an external performance (col. 6, ll. 5-25) and a server (col. 3, ll. 60-61; col. 4, ll. 5-22). It would have been obvious to include the highlighting of graphics in sync to an external performance with the disclosure of Cave because Cave teaches highlighting the score during playback and highlighting helps the score to playback in a timely manner; and to include a server with the disclosure of Cave because Cave teaches storing files on multiple devices for delivery and storing files on a hard drive enables shared access over a network.

As per dependent claim 15, Cave fails to disclose a network for downloading the interactive graphics, which is disclosed by Kennedy (col. 3, ll. 60-61; Figs. 1 & 2). It would have been obvious to one of ordinary skill in the art to include a network for downloading the interactive graphics in the disclosure of Cave because he teaches preparing files to deliver multimedia objects and delivery enables the sharing of data between computers.

As per dependent claim 16, Cave discloses the interactive graphics is sheet music (abstract), as does Kennedy (Fig. 7). Cave fails to disclose the external performance is a musical performance, which Kennedy does disclose (col. 6, ll. 5-25). It would have been obvious to one skilled in the art at the time of invention to combine Kennedy's disclosure of an external musical performance with that of Cave so that playback would be interactive.

3.   Claims 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cave and further in view of Marlin Eller, U.S. Patent 5,889,860, 3/1999.

As per independent claim 17, Cave discloses storing graphical data (col. 6, ll. 1-15; Fig. 2A), bounding boxes controlling display of the graphical data (col. 8, ll. 15-25), contiguity and hierarchy of the bounding boxes to eliminate repetitive encoding of the bounding boxes (Fig. 2D), thereby reducing the number of bytes used to represent the graphical data and providing the compressed graphical data (col. 8, ll. 15-30). Cave fails to disclose a server, which Eller discloses (Fig. 1). It would have been obvious to one of ordinary skill in the art to include the server disclosed by Eller with the disclosure of Cave because Cave teaches storing files on multiple devices for delivery and storing files on a hard drive enables shared access over a network.

As per independent claim 18, discloses defining the position of a subsequent bounding box on the display in terms of an offset from a previous bounding box (col. 7,

ll. 28-40), which Eller fails to disclose. However, it would have been obvious to combine

the disclosures of Eller and Cave because Eller teaches receiving files for display of

data (col. 3, ll. 15-30) and Cave teaches positioning data in the files for subsequent

playback.

As per dependent claim 19, Eller discloses transmitting the compressed

graphical data via a network (Fig. 9), which Cave fails to specifically disclose. It would

have been obvious to include the transmission of compressed data as disclosed by Eller

in the disclosure of Cave because Cave teaches compressing the data prior to delivery

for playback.

As per dependent claim 20, Cave discloses programming the device to be able to

determine hierarchical relationships of all bounding boxes, which Eller fails to

specifically disclose (col. 7, ll. 40-55). It would have been obvious to combine the

disclosures because Eller teaches decompressing the transmitted data for playback and

Cave teaches providing playback capabilities.

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to **Chante Harrison** whose telephone number is **(703)**

305-3937.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, **Michael Razavi,** can be reached at **(703) 305-4713**.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
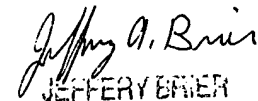
Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal

Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or

proceeding should be directed to the Technology Center 2600 Customer Service

Office whose telephone number is (703) 306-0377.

Ceh

October 17, 2002

JEFFERY BRIER
PRIMARY EXAMINER